WHAT IS CLAIMED IS:

1. A probing method comprising steps of:

moving a main chuck to align an object of inspection on the main chuck with probes of a probe card located over the main chuck;

moving the main chuck toward the probe card, thereby bringing electrodes of the object of inspection into contact with the probes;

overdriving the main chuck toward the probe card while measuring a load applied to the object of inspection by contact with the probes and controlling the movement of the main chuck in accordance with the measured load; and

inspecting electrical properties of the object of inspection by means of the probes.

2. A probing method according to claim 1, wherein said control of the movement of the main chuck is control of an overdrive based on the measured load, such that the load has a given value.

3. A probing method according to claim 1 or 2, wherein said control of the movement of the main chuck includes steps of obtaining a distortion of the main chuck in accordance with the measured load and correcting at least one of dislocations between the object of inspection and the probe in X-, Y-, and θ-directions in accordance with the distortion.

4. A probing method according to claim 1, wherein

said measurement of the load applied to the object of inspection by contact with the probes includes steps of locating a polishing mechanism right under the probes, the polishing mechanism including a polish plate to be used to polish the tip of the probes; moving the located polishing mechanism toward the probe card, thereby bringing the polish plate into contact with the probes; overdriving the polishing mechanism toward the probe card; and measuring a load applied to the polish plate by the probes by means of a pressure sensor attached to the polishing mechanism during the overdrive operation.

5. A probing method comprising steps of:

moving a main chuck in X-, Y-, and θ-directions to align an object of inspection on the main chuck with probes of a probe card located over the main chuck;

moving the main chuck in a Z-direction, thereby bringing electrodes of the object of inspection into contact with the probes;

overdriving the main chuck toward the probe card while measuring a load applied to the object of inspection by contact with the probes by means of a sensor and controlling the movement of the main chuck in accordance with the measured load; and

inspecting electrical properties of the object of inspection by means of the probes.

6. A probing method according to claim 5, wherein

said sensor is located on at least one of the lower part of the main chuck and between an LM guide and an XY-stage on which the main chuck is set.

7. A probing method according to claim 5, wherein said control of the movement of the main chuck is control of an overdrive of the main chuck.

8. A probing method according to claim 5 or 7, wherein said control of the movement of the main chuck includes steps of obtaining a distortion of the main chuck in accordance with the measured load and correcting at least one of dislocations between the object of inspection and the probes in the X-, Y-, and θ-directions in accordance with the distortion.

9. A probing method in which a main chuck is moved in X-, Y-, and θ-directions to align an object of inspection on the main chuck with probes of a probe card located over the main chuck, the main chuck is moved in a Z-direction so that electrodes of the object of inspection are brought into contact with the probes, the main chuck is overdriven toward the probe card, and electrical properties of the object of inspection are inspected by means of the probes, the probing method comprising steps of:

locating a polishing mechanism right under the probes, the polishing mechanism including a polish plate to be used to polish the tip of the probes;

moving the located polishing mechanism toward

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the probe card, thereby bringing the polish plate into contact with the probes;

overdriving the polishing mechanism toward the probe card;

measuring a load applied to the polish plate by the probes by means of a pressure sensor during the overdrive operation; and

controlling the movement of the main chuck in accordance with the measured load.

10. A probing method according to claim 9, wherein said sensor is set on the polishing mechanism.

11. A probing method according to claim 9, wherein said control of the movement of the main chuck is control of an overdrive of the main chuck.

12. A probing method according to claim 9 or 11, wherein said control of the movement of the main chuck includes steps of obtaining a distortion of the main chuck in accordance with the measured load and correcting at least one of dislocations between the object of inspection and the probes in the X-, Y-, and θ-directions in accordance with the distortion.

13. A probing method according to claim 9, wherein said control of the overdrive of the main chuck includes steps of obtaining a distortion of the polish plate in accordance with the relation between the load applied to the polish plate and the distortion of the polish plate and the load applied to the polish plate

and measured by means of the pressure sensor; obtaining the spring constant of the probes from the distortion and an overdrive of the polish plate; obtaining the spring constant of the main chuck in accordance with the spring constant of the probes and the relation between the load and a distortion of the main chuck; obtaining a load applied to the main chuck by the probes in accordance with the spring constant of the main chuck and the relation between the spring constant and the overdrive of the main chuck; and controlling the overdrive of the main chuck in accordance with the obtained load.

14. A probing method according to claim 9, further comprising steps of obtaining a distortion of the main chuck in accordance with the load measured by means of the pressure sensor and correcting dislocations between the object of inspection and the probe in X- and Y-directions in accordance with the distortion.

15. A probing apparatus comprising:

a main chuck carrying an object of inspection thereon;

a probe card having a plurality of probes and located over the main chuck;

a drive mechanism for moving the main chuck in X-, Y-, Z-, and θ-directions;

a pressure sensor adapted to measure a load applied to the object of inspection by the probes when

the drive mechanism moves the main chuck toward the probe card so that the object of inspection on the main chuck is brought into contact with probes; and

a controller for controlling the movement of the main chuck in accordance with a position where the probes touches the object of inspection and the load measured by means of the pressure sensor.

16. A probing apparatus comprising:

a main chuck carrying an object of inspection thereon;

a probe card having a plurality of probes and located over the main chuck;

a drive mechanism for moving the main chuck in X-, Y-, Z-, and θ-directions;

a pressure sensor adapted to measure a load applied to the object of inspection by the probes when the drive mechanism moves the main chuck toward the probe card so that the object of inspection on the main chuck is brought into contact with the probes; and

a controller for obtaining a distortion of the main chuck in accordance with a position where the probes touches the object of inspection and the load measured by means of the pressure sensor.

17. A probing apparatus according to claim 15 or 16, wherein said controller controls an overdrive in accordance with the measured load so that the load has a given value.

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18. A probing apparatus according to claim 16, wherein said controller corrects at least one of dislocations between the object of inspection and the probes in the X-, Y-, and θ-directions in accordance with the distortion.

19. A probing apparatus comprising:

a main chuck carrying an object of inspection thereon;

a polishing mechanism having a polish plate and attached to the main chuck;

a probe card having a plurality of probes and located over the main chuck;

a drive mechanism for moving the main chuck in X-, Y-, Z-, and θ-directions;

a pressure sensor adapted to measure a load applied to the polish plate of the polishing mechanism attached to the main chuck by the probes when the drive mechanism moves the main chuck toward the probe card so that the polish plate is brought into contact with the probes; and

a controller for controlling the drive mechanism, the controller including a mechanism for obtaining the spring constant of the probes in accordance with the load measured by means of the pressure sensor, obtaining the spring constant of the main chuck in accordance with the relation between the load and a distortion of the main chuck, and obtaining a load

applied in the position where the probes touch the main chuck in accordance with the relation between the respective spring constants of the probes and the main chuck and an overdrive of the main chuck.